

FINAL 6/6/2012

PARTICIPATION RATES FOR CMAP Measures

This worksheet shows the participation rates for all CMAP measures.

	SDP/TS	
Local Measures - Electric/Natural Gas		
Commercial/Residential Commissioning	2020	2020
Average Energy Reduction (%)	15%	15%
N Commercial MP	30%	25%
Commercial Efficiency Retrofit		
Energy Reduction (kWh/unit)	15%	15%
Area Retrofit (% of SF)	30%	25%
Residential Efficiency Retrofit, Assessed and Audited		
Energy Reduction (kWh/unit)	30%	30%
Number of Units Retrofit (% total units)	30%	25%
Residential Efficiency Retrofit, Smart Home		
Energy Reduction (kWh/unit)	20%	20%
Number of Units Retrofit (% total units)	12%	30%
Residential Solar Water Heating Retrofit, SF		
Number of Units (% total units)	5%	15%
Commercial Solar Water Heating Retrofit		
Reduction in water heating energy	50%	50%
% commercial water heating energy offset	5%	15%
Commercial PV		
Total Capacity (kW)	100	100
Commercial Bldg		
Total Capacity (MW)	150	250
Residential Heat Conservation		
% better than T24	15%	
Participation Rate after 2015	100%	
Commercial Heat Conservation		
% better than T24	15%	
Participation Rate after 2015	100%	
Water Use Efficiency		
Gallons/person/day	142	116
City Building Efficiency		
% reduction in total energy consumption	20%	30%
Local Measures - Transportation		
Mass Transit	2020	2020
% mode share	8%	10%
Bicycle Infrastructure		
Bicycle lanes per square mile	4	4
Parking - reduced space		
% of total reduced Metro area	10%	20%
Parking - preferred parking for Car		
% reserved for electric vehicles	100%	20%
Parking - increased fees		
\$ per day	24	30
City of San Diego Share of SB 375 Reductions (includes telecommute, carpool, vanpool, buspool, bike/move/ride, HOV/HOT lanes, safe routes to school)		
% of target achieved	100%	100%
Shared Office and workspaces		
Number of signals and roundabouts, each	11	20
Electric Vehicles		
% miles driven of cars and light duty truck miles (private vehicle miles)	4%	11%
Governmental Fleet to EV		
% reduction, assessed fleet	90%	90%
Local Measures - Land Use	2020	2020
Smart Growth		
% increase in population density from 2000	12%	22%
Local Measures - Waste	2020	2020
Street Trash and Capture Landfill Gas		
% landfill gas capture	80%	80%
% wastewater gas capture	98%	98%
State/Federal Measures	2020	2020
Renewable Portfolio Standard		
% of sales that is renewable	18%	18%
Fuel Economy (miles per gallon) for CAFE standards in fleet		
MPG for New Passenger Vehicles	34.5	34.5
Low-Carbon Fuel Standard		
% reduction in carbon intensity	10%	10%
CAHPS Tire Pressure Program		
% CAHPS goal achieved	100%	100%
CAHPS Heavy Duty Vehicle Regulation		
% CAHPS goal achieved	100%	100%

Basis for Participation Rates

Based on (1) The Cost Effectiveness of Commercial Building Commissioning: A Meta-Analysis of Energy and Non-Energy Impacts in Existing Buildings and New Construction in the United States, available at <http://web.mit.edu/embu/pubs/pdf/cx-costs-benefits.pdf> and (2) CEC Options for Energy Efficiency in Existing Buildings - <http://www.energy.ca.gov/2005sp> Based on California Long-Term Energy Efficiency Strategic Plan.

Based on energy reduction levels from SDBE Standard Performance Contract Program.

Based on policy direction from the California Public Utilities Commission to increase the number of deep retrofits and California Long-Term Energy Efficiency Strategic Plan.

Based on Energy Upgrade California program participation.

Based on policy direction from the California Public Utilities Commission to increase the number of deep retrofits and California Long-Term Energy Efficiency Strategic Plan.

Based on City of San Diego multi-family efficiency program participation.

Based on policy direction from the California Public Utilities Commission to increase the number of deep retrofits and California Long-Term Energy Efficiency Strategic Plan.

Based on incentives available through the California Solar Initiative (CSI). Energy savings based on CSI evaluations.

Based on average energy reduction due to solar water heating.

Based on incentives available through the California Solar Initiative.

Based on current trends and availability of incentives through 2016.

Based on current trends and availability of incentives through 2016.

Based on a prorated share of technical potential for the SDBE territory.

Based on California Green Building Code and California Long-Term Energy Efficiency Strategic Plan to achieve net zero energy homes by 2020.

Assumes that this level is required.

Based on California Green Building Code and California Long-Term Energy Efficiency Strategic Plan to achieve net zero energy homes by 2030.

Assumes that this level is required.

2020 values based on 2010 Urban Water Management Plan, typical adopted for the City of San Diego under SB 7X. 2035 value Represents a 30% per capita reduction from average baseline 1996-2005 from UWWMP, viewed as an acceptable goal by stakeholders

Based on historic energy reductions in City of San Diego operations

SANDAG RTP 2050 forecast for the region applied to the City

City of San Diego Bicycle Master Plan 2022 assumes a 270% increase in bicycle commuters within 20 years. If to achieve this would require nearly tripling the bicycle lane miles per square mile in 2020 from current (2010) estimated 1.4 lanes/square mile. 4 miles in 2020 is then a reasonable expectation.

As advised by City of San Diego

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2020 value from SANDAG RTP 2050 SCS Scenario measure for Metro region. 2035 value extrapolated from SANDAG RTP 2050 SCS Scenario measure for Metro region

Based on and extrapolated from SANDAG's Sustainable Communities Strategy.

Based on SANDAG's estimates for SB 375 emission reduction targets scaled to City

Based on discussion with City traffic management as feasible

Based on CEC projection of electricity use for electric vehicles in 2020. 2035 value is linear extrapolation from 2022 value.

As advised by City of San Diego

SANDAG RTP 2050 Growth Forecast

As advised by City of San Diego and state mandate

As advised by City of San Diego as planned and feasible

Statutory requirement. See CA Public Utilities Code § 399.11 et seq. and CA Public Resources Code § 25740 et seq., as adopted in SB 41-2 on 4-12-11.

Based on federal CAFE standards

Low-Carbon Fuel Standard requirements as adopted by the California Air Resources Board applied to the fuel consumption of the City of San Diego.

Tire Pressure Program requirements as adopted by the California Air Resources Board applied to the City of San Diego

Heavy Duty Vehicle Regulation requirements as adopted by the California Air Resources Board

% estimates scaled to City